CONTENTS OF VOLUME 19

Number 1

Review
Gopal B. Saha, Raymundo T. Go and William J. MacIntyre 1 Radiopharmaceuticals for cardiovascular imaging

Kayoko Nakamura, Aida Ruiz-Juvera, Atsushi Kubo and Shozo Hashimoto 21 Evaluation of the ^{111}In-(Sn)-citrate method to label antibodies for radioimmunotargeting studies

Kazuo Kubota, Kiichi Ishiwata, Susumu Yamada, Roko Kubota, Tachio Sato, Jutaro Takahashi, Hiroshi Ito, Tatsuo Ido and Masao Tada 27 Dose–responsive effect of radiotherapy on the tumor uptake of L-[methyl-^{11}C]methionine; feasibility for monitoring recurrence of tumor

Kazuya Matsumoto, Yasuhisa Fujibayashi, Yasushi Arano, Kouichi Wada and Akira Yokoyama 33 ^{62}Cu-labeled bifunctional radiopharmaceuticals with metabolizable ester groups

Kazuya Matsumoto, Yasuhisa Fujibayashi, Yoshiharu Yonekura, Kouichi Wada, Yasutaka Takemura, Junji Konishi and Akira Yokoyama 39 Application of the new zinc-62/copper-62 generator: an effective labeling method for ^{62}Cu-PTSM

Basant L. Malpani, Gururaj V. Kadival and Aban M. Samuel 45 Radioimmunoscintigraphic approach for the *in vivo* detection of tuberculomas—a preliminary study in a rabbit model

Heikki Minn, Lauri Kangas, Pirkko Kellokumpu-Lehtinen, Pekka Klemi, Hannu Sipilä, Jouni Vuorinen, Pirkko Härkönen and Matti Lähde 55 Uptake of 2-fluoro-2-deoxy-D-[U-^{14}C]glucose during chemotherapy in murine Lewis lung tumor

Gillian F. Morgan, Marcel Deblaton, Paul Van den Broeck, Benoit Bastin, Robert Pirotte, Philippe Michel, Pierre Clemens, Ulrich Abram and John R. Thornback 65 Synthesis and biological studies of neutral technetium(V) complexes containing NNOS donor sets

K. Leesmeister and K. Schwochau 73 Synthesis, characterization and biodistribution of tris(β-diketonato)technetium(III) complexes

James R. Ballinger and I. Boxen 79 Gallium-67-labelled red blood cells as a blood-pool marker for dual-isotope imaging

Richard P. Spencer, Fazle Hosain and Khalid A. Yoosufani 83 Bone density variation within lumbar vertebrae in apparently normal women

Irwin Fand, Robert M. Sharkey, John P. Grundy and David M. Goldenberg 87 Localization by whole-body autoradiography of intact and fragmented radiolabeled antibodies in a metastatic human colonic cancer model

Technical Note
Meral Tayan Ercan and Heinz Kriegel 101 Autoradiography of lymph nodes with ^{99m}Tc-dextran in rabbits

Letter to the Editors
Noriko Shimura, Shuji Kojima, Akiko Kubodera, Kazuhiko Kubota, Toshio Takahashi and Hiyoshimaru Oyamada 105 Radioimmunodetection of human colon cancer using ^{99m}Tc–MDP–MoAb-A7 in mice

Abstracts from the International Symposium on Nuclear Imaging in Drug Discovery, Development and Approval 111

Announcement 140

Number 2

James F. Kronauge, Mary L. Chiu, Jeffrey S. Cone, Alan Davison, B. Leonard Holman, Alun G. Jones and David Piwnica-Worms — 141 Comparison of neutral and cationic myocardial perfusion agents: characteristics of accumulation in cultured cells

A. Luxen, M. Guillaume, W. P. Melega, V. W. Pike, O. Solin and R. Wagner — 149 Production of 6-[^{18}F]fluoro-L-DOPA and its metabolism *in vivo*—a critical review

J. E. Cremer, S. P. Hume, B. M. Cullen, R. Myers, L. G. Manjil, D. R. Turton, S. K. Luthra, D. M. Bateman and V. W. Pike — 159 The distribution of radioactivity in brains of rats given [*N*-methyl-^{11}C]PK 11195 *in vivo* after induction of a cortical ischaemic lesion

Jean N. DaSilva, Christian Crouzel, Oscar Stulzaft, Marina Khalili-Varasteh and Philippe Hantraye — 167 Synthesis, tissue distribution in rats and PET studies in baboon brain of no-carrier-added [^{18}F]RU 52461: *in vivo* evaluation as a brain glucocorticoid receptor radioligand

H. Ali, J. Rousseau, M. Diksic and J. E. van Lier — 175 Synthesis, receptor binding and target-tissue uptake of carbon-11-labeled carbamate derivatives of estradiol and hexestrol

S. Osman and H. J. Danpure — 183 The use of 2-[^{18}F]fluoro-2-deoxy-D-glucose as a potential *in vitro* agent for labelling human granulocytes for clinical studies by positron emission tomography

E. Livni, Alan J. Fischman, Stephen Ray, Ian Sinclair, David R. Elmaleh, Nathaniel M. Alpert, Stephen Weiss, John A. Correia, Douglas Webb, Robert Dahl, William Robeson, Donald Margouleff, Robert Liss, H. William Strauss and Robert H. Rubin — 191 Synthesis of ^{18}F-labeled fluconazole and positron emission tomography studies in rabbits

G. J. Beyer, R. Bergmann, G. Kampf, P. Mäding and F. Rösch — 201 Simultaneous study of the biodistribution of radio-yttrium complexed with EDTMP and citrate ligands in tumour-bearing rats

A. Najafi, M. M. Alauddin, A. Sosa, G. Q. Ma, D. C. P. Chen, A. L. Epstein and M. E. Siegel — 205 The evaluation of ^{186}Re-labeled antibodies using N_2S_4 chelate *in vitro* and *in vivo* using tumor-bearing nude mice

Virginia K. Langmuir — 213 Radioimmunotherapy: clinical results and dosimetric considerations

W. Vaalburg, H. H. Coenen, C. Crouzel, Ph. H. Elsinga, B. Långström, C. Lemaire and G. J. Meyer — 227 Amino acids for the measurement of protein synthesis *in vivo* by PET

C. Wu, F. Virzi and D. J. Hnatowich — 239 Investigations of N-linked macrocycles for ^{111}In and ^{90}Y labeling of proteins

Irene Virgolini, J. O'Grady, Graziana Lupattelli, F. Rauscha, P. Angelberger, S. Ventura and H. Sinzinger — 245 *In vivo* quantification of cholesterol content in human carotid arteries by quantitative gamma-camera imaging after injection of autologous low density lipoproteins (LDL)

Announcement — I

Number 3

Nada Vanlić-Razumenić, Natalija Pujić, Nasta Dedović, Kosta Kostić and Danica Nastić-Mirić — 251 Labelling of leukocytes with ^{99m}Tc–HMPAO for scintigraphy of inflammatory lesions and abscesses

C. Foulon, D. Guilloteau, J. L. Baulieu, M. J. Ribeiro-Barras, G. Desplanches, Y. Frangin and J. C. Besnard — 257 Estrogen receptor imaging with 17α-[^{123}I]iodovinyl-11β-methoxyestradiol (MIVE$_2$)—Part I. Radiotracer preparation and characterization

M. J. Ribeiro-Barras, C. Foulon, J. L. Baulieu, D. Guilloteau, P. Bougnoux, J. Lansac and J. C. Besnard — 263 Estrogen receptor imaging with 17α-[^{123}I]iodovinyl-11β-methoxyestradiol (MIVE$_2$)—Part II. Preliminary results in patients with breast carcinoma

C. S. John, E. O. Schlemper, P. Hosain, C. H. Paik and R. C. Reba — 269 Synthesis, characterization and biodistribution of a new hexadentate aminethiol ligand labeled with Tc-99m

Ganesan Vaidyanathan and Michael R. Zalutsky — 275 Labeling proteins with fluorine-18 using *N*-succinimidyl 4-[^{18}F]fluorobenzoate

J. Kropp, K. R. Ambrose, F. F. Knapp Jr, H. P. Nissen and H. J. Biersack — 283 Incorporation of radioiodinated IPPA and BMIPP fatty acid analogues into complex lipids from isolated rat hearts

Leslie A. Khawli, Annick D. Van den Abbeele and Amin I. Kassis — 289 *N*-(*m*-[^{125}I]Iodophenyl)maleimide: an agent for high yield radiolabeling of antibodies

Leslie A. Khawli and Amin I. Kassis — 297 *m*-[^{125}I]Iodoaniline: a useful reagent for radiolabeling biotin

K. Shiba, H. Mori, H. Matsuda and K. Hisada — 303 Technetium-99m *p*-iodophenethyldiaminodithiol (DADT-IPE): potential brain perfusion imaging agent for SPECT

Kiichi Ishiwata, Tatsuo Ido, Chihiro Honda, Mieko Kawamura, Masamitsu Ichihashi and Yutaka Mishima — 311 4-Borono-2-[^{18}F]fluoro-D,L-phenylalanine: a possible tracer for melanoma diagnosis with PET

Raymond E. Gibson, H. Donald Burns, Holly H. Thorpe, Wai-si Eng, Richard Ransom and Howard Solomon — 319 *In vivo* binding and autoradiographic imaging of (+)-3-[^{125}I]Iodo-MK-801 to the NMDA receptor–channel complex in rat brain

Zaihui Zhang, Donald M. Lyster, Gordon A. Webb and Chris Orvig — 327 Potential ^{67}Ga radiopharmaceuticals for myocardial imaging: tris(1-aryl-3-hydroxy-2-methyl-4-pyridinonato)gallium(III) complexes

S. M. N. Efange, A. K. Dutta, R. H. Michelson, H. F. Kung, J. R. Thomas, J. Billings and R. J. Boudreau — 337 Radioiodinated 2-hydroxy-3-(4-iodophenyl)-1-(4-phenylpiperidinyl)-propane: potential radiotracer for mapping central cholinergic innervation *in vivo*

C. M. Keriel, F. M. Dubois, D. S. Marti Batlle, C. R. Pernin, X. M. Leverve, J. P. Mathieu, M. Comet and P. J. Cuchet — 349 Assessment of iodohexadecenoic acid as a tracer of fatty acid metabolism by external detection: a study on isolated rat heart

Alan B. Packard and Carol Lambert — 357 Evaluation of osmium(II)–nitrosyl complexes as a method to increase the yield of the ^{191}Os–^{191m}Ir generator

Henry F. VanBrocklin, Martin G. Pomper, Kathryn E. Carlson, Michael J. Welch and John A. Katzenellenbogen — 363 Preparation and evaluation of 17-ethynyl-substituted 16α-[^{18}F]fluoroestradiols: selective receptor-based PET imaging agents

G. Bormans, B. Cleynhens, M. Hoogmartens, M. de Roo and A. Verbruggen — 375 Evaluation of ^{99m}Tc-mercaptoacetyltripeptides in mice and a baboon

Timothy R. DeGrado and Detlef C. Moka — 389 Non-β-oxidizable ω-[^{18}F]fluoro long chain fatty acid analogs show cytochrome *P*-450-mediated defluorination: implications for the design of PET tracers of myocardial fatty acid utilization

S. Nagamachi, K. Inoue, H. Hoshi, S. Jinnouchi, T. Ohonishi, S. Futami, K. Watanabe, M. Wakisaka and Y. Morotomi — 399 Lung scintigraphy with [^{123}I]IMP in patients with pulmonary tuberculosis

Manhar M. Vora and Mohammed Dhalla — 405 *In vivo* studies of unlabeled and radioiodinated rhodamine-123

Alan Daugherty, Michael R. Kilbourn, Carmen S. Dence, Burton E. Sobel and Suzanne R. Thorpe — 411 Quantitative assessment of lipoprotein metabolism by positron emission tomography with an ^{18}F-containing residualizing label

Technical Note

Renato B. del Rosario, Lee Ann Baron, Richard G. Lawton and Richard L. Wahl — 417 Streptavidin-biotinylated IgG conjugates: a simple procedure for reducing polymer formation

Corrigendum — I

Number 4

Muhammad Ashraf Tariq and Ivor L. Preiss — 423 — Time-dependent distribution of selenate and selenite selenium in male C57L/J mice

Susan L. Madsen, Michael J. Welch, Ramunas J. Motekaitis and Arthur E. Martell — 431 — $^{68}GaTHM_2BED$: a potential generator-produced tracer of myocardial perfusion for positron emission tomography

Mian M. Alauddin, Leslie A. Khawli and Alan L. Epstein — 445 — An improved method of direct labeling monoclonal antibodies with ^{99m}Tc

Hideo Saji, Daisuke Tsutsumi, Yoshiaki Kiso, Satoshi Iimuma, Tsutomu Mimoto, Kenichi Akaji, Yasuhiro Magata, Hideo Nakamura, Atsuko Kita, Junji Konishi and Akira Yokoyama — 455 — Synthesis and biological evaluation of a ^{13}N-labeled opioid peptide

Martin G. Pomper, Monica J. Kochanny, Andrea M. Thieme, Kathryn E. Carlson, Henry F. VanBrocklin, Carla J. Mathias, Michael J. Welch and John A. Katzenellenbogen — 461 — Fluorine-substituted corticosteroids: synthesis and evaluation as potential receptor-based imaging agents for positron emission tomography of the brain

Th. Maina and E. Chiotellis — 481 — Synthesis, radiochemistry and biological evaluation of technetium-99m complexes with 1,8-diamine-3,6-dithiaoctane (DDO) ligands

John Baldas and John Bonnyman — 491 — Preparation, HPLC studies and biological behaviour of ^{99m}Tc- and ^{99m}TcN-radiopharmaceuticals based on quinoline type ligands

B. Mazière, H. H. Coenen, C. Halldin, K. Någren and V. W. Pike — 497 — PET radioligands for dopamine receptors and re-uptake sites: chemistry and biochemistry

Corrigendum — I

Announcements — III

Number 5

Jesse Baumgold, Pei-ying Ling and Richard C. Reba — 513 — Use of *ex vivo* binding to measure the brain concentrations of putative radioligands

C. H. Paik, V. K. Sood, N. Le, L. Cioloca, J. A. Carrasquillo, J. C. Reynolds, R. D. Neumann and R. C. Reba — 517 — Radiolabeled products in rat liver and serum after administration of antibody–amide–DTPA–indium-111

Hideo Saji, Yasuhiko Iida, Yasuhiro Magata, Yoshiharu Yonekura, Yasushi Iwasaki, Satoshi Sasayama, Junji Konishi, Iwao Nakatsuka, Kunio Shiba, Akira Yoshitake and Akira Yokoyama — 523 — Preparation of ^{123}I-labeled 2′-iodospiperone and imaging of D_2 dopamine receptors in the human brain using SPECT

Hideo Saji, Yuji Kuge, Kazutaka Yamamoto, Yasuhiro Magata, Yoshiharu Yonekura, Junji Konishi and Akira Yokoyama — 531 — Accumulation of radioactivity in the pancreas after intravenous administration of [^{13}N]ammonia

William T. Phillips, Alan S. Rudolph, Beth Goins, James H. Timmons, Robert Klipper and Ralph Blumhardt — 539 — A simple method for producing a technetium-99m-labeled liposome which is stable *in vivo*

Makiko Suehiro, Ursula Scheffel, Robert F. Dannals, Alan A. Wilson, Hayden T. Ravert and Henry N. Wagner Jr — 549 — Synthesis and biodistribution of a new radiotracer for *in vivo* labeling of serotonin uptake sites by PET, *cis*-*N*,*N*-[^{11}C]dimethyl-3-(2′,4′-dichlorophenyl)-indanamine (*cis*-[^{11}C]DDPI)

Muhammad Ashraf Tariq and Ivor L. Preiss — 555 — [^{75}Se]Selenite and [^{75}Se]selenate fluctuations during the development of murine hepatoma

Marc S. Berridge, Emily H. Cassidy, Andrew H. Terris and Jean-Marc Vesselle — 563 — Preparation and *in vivo* binding of [^{11}C]carazolol, a radiotracer for the beta-adrenergic receptor

Chester A. Mathis, John E. Bishop, John M. Gerdes, John M. Whitney, Kathleen M. Brennan and William J. Jagust — 571 Synthesis and evaluation of high affinity, aryl-substituted [^{18}F]fluoropropylbenzamides for dopamine D-2 receptor studies

Alberto L. Horenstein, Amalia Koss, Lucas L. Colombo and Horacio M. Glait — 589 Specific biodetection of a murine spontaneous mammary carcinoma with labelled anti-human blood group-A monoclonal antibody

Technical Note
C. Foulon, L. Garreau, S. Chalon, G. Desplanches, V. Frangin, J.-C. Besnard, J. L. Baulieu and D. Guilloteau — 597 Synthesis and *in vitro* binding properties of halogenated analogues of GBR as new dopamine uptake carrier ligands

Letter to the Editors
J. Clerc, M. Izembart and L. Barritault — 601 ^{131}I therapy in diffuse goiters: should we still use uptake free methods to calculate activities?

Number 6

Editorial
Michael R. Kilbourn — 603 Shades of grey: radiopharmaceutical chemistry in the 1990s and beyond

General Papers
Z. M. Zhang, J. R. Ballinger, K. Sheldon and I. Boxen — 607 Evaluation of reduction-mediated labelling of antibodies with technetium-99m

Kiichi Ishiwata, Toshihiro Takahashi, Ren Iwata, Michio Tomura, Masao Tada, Jun Itoh, Motonobu Kameyama and Tatsuo Ido — 611 Tumor diagnosis by PET: potential of seven tracers examined in five experimental tumors including an artificial metastasis model

Matsutaro Murakami, Yasushi Kondoh, Yin Weimin, Sigenori Mizusawa, Hiroyuki Nakamichi, Kazuhiro Takahashi, Hiroshi Sasaki, Hidehiro Iida, Shuichi Miura, Iwao Kanno and Kazuo Uemura — 619 A convenient method for regional monoamine oxidase-A determination by [^{14}C]clorgyline autoradiography

C. Sawas-Dimopoulou, E. Papanastasiou, A. Angelis, N. Toubanakis and L. Margaritis — 627 Tissue localization of [^{125}I]triiodothyronine in the periorbital area of mice: a microautoradiographic study

S. W. Schwendner, J. P. Weichert, M. A. Longino, M. D. Gross and R. E. Counsell — 639 Potential organ or tumor imaging agents. 32. A triglyceride ester of *p*-iodophenyl pentadecanoic acid as a potential hepatic imaging agent

R. L. E. Ehrenkaufer, S. Klam, K. Makoroff, S. Giandinoto, T. Morton, D. Moroney and P. Nowak — 651 Internal-surface reversed-phase chromatography for plasma metabolite analysis of radiopharmaceuticals

James W. Fleshman, Judith M. Connett, David M. Neufeld, Todd J. Garvin and Gordon W. Philpott — 659 Tumor localization and radioimaging with mixtures of radioiodinated monoclonal antibodies directed to different colon cancer associated antigens

K. Y. Pak, M. A. Nedelman, S. H. Tam, E. Wilson and P. E. Daddona — 669 Labeling and stability of radiolabeled antibody fragments by a direct ^{99m}Tc-labeling method

N. C. Goomer, P. V. Kulkarni, A. Constantinescu, P. Antich, R. W. Parkey and J. R. Corbett — 679 Synthesis and evaluation of technetium-99m monocationic mixed ligand complexes of phenyl substituted/condensed tetradentate Schiff's bases and trimethylphosphine

U. Schilling, E. A. Friedrich, H. Sinn, H. H. Schrenk, J. H. Clorius and W. Maier-Borst — 685 Design of compounds having enhanced tumour uptake, using serum albumin as a carrier—Part II. *In vivo* studies

Ingrid D. Baerga, Roger P. Maickel and Mark A. Green — 697 Subcellular distribution of tissue radiocopper following intravenous administration of ^{67}Cu-labeled Cu-PTSM

Technical Note
A. Freud, A. Canfi and M. Zafran — 703 A convenient synthesis of *N*-succinimidyl-3-iodo-[^{125}I]benzoate, a reagent for protein iodination

Letter to the Editors
N. Nair, U. N. Nayak, P. Ramanathan, N. Ramamoorthy and S. S. Sachdeva — 705 Utility of technetium-t-butyl isonitrile (^{99m}Tc-TBI) myocardial imaging in coronary artery disease

Number 7

Aren van Waarde, Joan G. Meeder, Paul K. Blanksma, Jaap Bouwer, Gerben M. Visser, Philip H. Elsinga, Anne M. J. Paans, Willem Vaalburg and Kong I. Lie — 711 Suitability of CGP-12177 and CGP-26505 for quantitative imaging of β-adrenoceptors

Jakobina Grétarsdóttir, Eva Forssell Aronsson, Lars Jacobsson, Ólöf Hafsteinsdóttir, Stig Holmberg, Larsolof Hafström, Sture Lindegren, Börje Karlsson, Leif Lindholm and Sören Mattsson — 719 Comparison of the biodistribution of ^{75}Se- and ^{131}I-labelled monoclonal antibodies in nude mice

Chinda Lerthirunwong, Kenneth T. Cheng and William B. Hladik III — 727 A study of the concept of non-radioactive unit-dosed reagent kits [cold unit doses (CUDs)] as an efficient and cost-saving method for ^{99m}Tc radiopharmaceutical preparation

C. Ho, N. V. Emanuele, L. Kirsteins and A. M. Lawrence — 737 *In vivo* studies of ethanol on prolactin and luteinizing hormone in rats and mice

John Baldas and John Bonnyman — 741 Preparation and biological behaviour of some neutral ^{99m}Tc–carbonyl dithiocarbamates showing rapid hepatobiliary excretion

Kazuo Kubota, Kiichi Ishiwata, Masao Tada, Susumu Yamada, Roko Kubota, Ren Iwata, Kazunori Sato, Koji Kimata and Tatsuo Ido — 747 Investigation of tumor metastatic potential with *N*-[^{18}F]fluoroacetyl-D-glucosamine

Izumi Ogihara-Umeda, Toru Sasaki and Hideo Nishigori — 753 Development of a liposome-encapsulated radionuclide with preferential tumor accumulation—the choice of radionuclide and chelating ligand

J. A. Van der Krogt, E. K. J. Pauwels, P. A. P. M. Van Doremalen, G. Wijnhoven, S. Reiffers, C. F. M. Van Valkenburg and O. J. S. Buruma — 759 4-[^{123}I]Iodospiperone as a ligand for dopamine DA receptors: *in vitro* and *in vivo* experiments in a rat model

Kathleen P. Plotzke, Terushi Haradahira, Louis Stancato, Norman M. Olken, Scott Skinner, Milton D. Gross, Richard L. Wahl and Raymond E. Counsell — 765 Selective localization of radioiodinated alkylphosphocholine derivatives in tumors

Laura E. DeForge, Mark R. DeGalan, Mohamed K. Ruyan, Roger S. Newton and Raymond E. Counsell — 775 Comparison of methods for incorporating a radioiodinated residualizing cholesteryl ester analog into low density lipoprotein

C. A. Roth, T. J. Hoffman, M. Corlija, W. A. Volkert and R. A. Holmes — 783 The effect of ligand structure on glutathione-mediated decomposition of propylene amine oxime derivatives

P. R. Singh, M. Corlija, D. E. Troutner, A. R. Ketring and W. A. Volkert — 791 Synthesis, characterization and biodistribution studies of a neutral-lipophilic Tc-99m N_3S_2 chelate

P. O. Zamora, J. A. Mercer-Smith, M. J. Marek, L. D. Schulte and B. A. Rhodes — 797 Similarity of copper and technetium binding sites in human IgG

Meral T. Ercan, Tülin Aras and Işil S. Ünsal — 803 Evaluation of ^{99m}Tc-erythromycin and ^{99m}Tc-streptomycin sulphate for the visualization of inflammatory lesions

Book Review
G. C. Lowenthal — 807

Number 8

Jochen Schuhmacher, Gábor Klivényi, William E. Hull, Ronald Matys, Harald Hauser, Holger Kalthoff, Wolf H. Schmiegel, Wolfgang Maier-Borst and Siegfried Matzku — 809 A bifunctional HBED-derivative for labeling of antibodies with ^{67}Ga, ^{111}In and ^{59}Fe. Comparative biodistribution with ^{111}In-DTPA and ^{131}I-labeled antibodies in mice bearing antibody internalizing and non-internalizing tumors

U. P. S. Chauhan, A. Babbar, R. Kashyap and R. Prakash — 825 Evaluation of a DMSA kit for instant preparation of ^{99m}Tc(V)–DMSA for tumour and metastasis scintigraphy

Quet Fah Ahkong and Colin Tilcock — 831 Attachment of ^{99m}Tc to lipid vesicles containing the lipophilic chelate dipalmitoylphosphatidylethanolamine–DTTA

S. P. Hume, A. A. Lammertsma, J. Opacka-Juffry, R. G. Ahier, R. Myers, J. E. Cremer, A. L. Hudson, D. J. Nutt and V. W. Pike — 841 Quantification of *in vivo* binding of [^{3}H]RX 821002 in rat brain: evaluation as a radioligand for central α_2-adrenoceptors

S. P. Hume, A. A. Lammertsma, C. J. Bench, V. W. Pike, C. Pascali, J. E. Cremer and R. J. Dolan — 851 Evaluation of *S*-[^{11}C]citalopram as a radioligand for *in vivo* labelling of 5-hydroxytryptamine uptake sites

C. Crouzel, M. Guillaume, L. Barré, C. Lemaire and V. W. Pike — 857 Ligands and tracers for PET studies of the 5-HT system—current status

Christer Halldin, Kjell Någren, Carl-Gunnar Swahn, Bengt Långström and Henrik Nybäck — 871 (*S*)- and (*R*)-[^{11}C]nicotine and the metabolite (*R*/*S*)-[^{11}C]cotinine. Preparation, metabolite studies and *in vivo* distribution in the human brain using PET

Sami S. Zoghbi, Ronald M. Baldwin, John P. Seibyl, Mohammed S. Al-Tikriti, Yolanda Zea-Ponce, Marc Laruelle, Elzbieta H. Sybirska, Scott W. Woods, Andrew W. Goddard, Robert T. Malison, Ralf Zimmerman, Dennis S. Charney, Eileen O. Smith, Paul B. Hoffer and Robert B. Innis — 881 Pharmacokinetics of the SPECT benzodiazepine receptor radioligand [^{123}I]iomazenil in human and non-human primates

T. N. Rao, Linda M. Gustavson, Ananthachari Srinivasan, Sudhakar Kasina and Alan R. Fritzberg — 889 Kinetics and mechanism of reactions of S-protected dithiol monoaminemonoamide (MAMA) ligands with technetium: characterization of a technetium–thiolate–thioether–MAMA complex, a kinetic intermediate of the reaction

Theodore S. T. Wang, Rashid A. Fawwaz and Ronald L. Van Heertum — 897 Photoreactive ^{111}In-cyclodextrin inclusion complex: a new heterobifunctional reagent for antibody labeling

AUTHOR INDEX

Abram U., 65
Ahier R. G., 841
Ahkong Q. F., 831
Akaji K., 455
Alauddin M. M., 205, 445
Ali H., 175
Alpert N. M., 191
Al-Tikriti M. S., 881
Ambrose K. R., 283
Angelberger P., 245
Angelis A., 627
Antich P., 679
Arano Y., 33
Aras T., 803
Aronsson E. F., 719

Babbar A., 825
Baerga I. D., 697
Baldas J., 491, 741
Baldwin R. M., 881
Ballinger J. R., 79, 607
Baron L. A., 417
Barré L., 857
Barritault L., 601
Bastin B., 65
Bateman D. M., 159
Baulieu J. L., 257, 263, 597
Baumgold J., 513
Bench C. J., 851
Bergmann R., 201
Berridge M. S., 563
Besnard J. C., 257, 263, 597
Beyer G. J., 201
Biersack H. J., 283
Billings J., 337
Bishop J. E., 571
Blanksma P. K., 711
Blumhardt R., 539
Bonnyman J., 491, 741
Bormans G., 375
Boudreau R. J., 337
Bougnoux P., 263
Bouwer J., 711
Boxen I., 79, 607
Brennan K. M., 571
Burns H. D., 319
Buruma O. J. S., 759

Canfi A., 703
Carlson K. E., 363, 461
Carrasquillo J. A., 517
Cassidy E. H., 563
Chalon S., 597
Charney D. S., 881
Chauhan U. P. S., 825
Chen D. C. P., 205
Cheng K. T., 727
Chiotellis E., 481
Chiu M. L., 141
Cioloca L., 517
Clemens P., 65
Clerc J., 601
Cleynhens B., 375
Clorius J. H., 685
Coenen H. H., 227, 497
Colombo L. L., 589
Comet M., 349
Cone J. S., 141
Connett J. M., 659
Constantinescu A., 679
Corbett J. R., 679
Corlija M., 783, 791
Correia J. A., 191
Counsell R. E., 639, 765, 775
Cremer J. E., 159, 841, 851
Crouzel C., 167, 227, 857
Cuchet P. J., 349
Cullen B. M., 159

Daddona P. E., 669
Dahl R., 191
Dannals R. F., 549
Danpure H. J., 183
DaSilva J. N., 167
Daugherty A., 411
Davison A., 141
Deblaton M., 65
Dedović N., 251
DeForge L. E., 775
DeGalan M. R., 775
DeGrado T. R., 389
Dence C. S., 411
Desplanches G., 257, 597
Dhalla M., 405
Diksic M., 175
Dolan R. J., 851
Dubois F. M., 349
Dutta A. K., 337

Efange S. M. N., 337
Ehrenkaufer R. L. E., 651
Elmaleh D. R., 191
Elsinga Ph. H., 711, 227
Emanuele N. V., 737
Eng W.-S., 319
Epstein A. L., 205, 445
Ercan M. T., 101, 803

Fand I., 87
Fawwaz R. A., 897
Fischman A. J., 191
Fleshman J. W., 659
Foulon C., 257, 263, 597
Frangin Y., 257, 597
Freud A., 703
Friedrich E. A., 685
Fritzberg A. R., 889
Fujibayashi Y., 33, 39
Futami S., 399

Garreau L., 597
Garvin T. J., 659
Gerdes J. M., 571
Giandinoto S., 651
Gibson R. E., 319
Glait H. M., 589
Go R. T., 1
Goddard A. W., 881
Goins B., 539
Goldenberg D. M., 87
Goomer N. C., 679
Green M. A., 697
Grétarsdóttir J., 719
Gross M. D., 639, 765
Grundy J. P., 87
Guillaume M., 149, 857
Guilloteau D., 257, 263, 597
Gustavson L. M., 889

Hafsteinsdóttir O., 719
Hafström L., 719
Halldin C., 497, 871
Hantraye P., 167
Haradahira T., 765
Härkönen P., 55
Hashimoto S., 21
Hauser H., 809
Hisada K., 303
Hladik III W. B., 727
Hnatowich D. J., 239
Ho C., 737
Hoffer P. B., 881
Hoffman T. J., 783
Holman B. L., 141
Holmberg S., 719
Holmes R. A., 783
Honda C., 311
Hoogmartens M., 375
Horenstein A. L., 589
Hosain F., 83, 269
Hoshi H., 399
Hudson A. L., 841
Hull W. E., 809
Hume S. P., 159, 841, 851

Ichihashi M., 311
Ido T., 27, 311, 611, 747
Iida H., 619
Iida Y., 523
Iimuma S., 455
Innis R. B., 881
Inoue K., 399
Ishiwata K., 27, 311, 611, 747
Ito H., 27
Itoh J., 611
Iwasaki Y., 523
Iwata R., 611, 747
Izembart M., 601

Jacobsson L., 719
Jagust W. J., 571
Jinnouchi S., 399
John C. S., 269
Jones A. G., 141

Kadival G. V., 45
Kalthoff H., 809
Kameyama M., 611
Kampf G., 201
Kangas L., 55
Kanno I., 619
Karlsson B., 719
Kashyap R., 825
Kasina S., 889
Kassis A. I., 289, 297
Katzenellenbogen J. A., 363, 461
Kawamura M., 311
Kellokumpu-Lehtinen P., 55
Keriel C. M., 349
Ketring A. R., 791
Khalili-Varasteh M., 167

Khawli L. A., 289, 297, 445
Kilbourn M. R., 411, 603
Kimata K., 747
Kirsteins L., 737
Kiso Y., 455
Kita A., 455
Klam S., 651
Klemi P., 55
Klipper R., 539
Klivényi G., 809
Knapp F. F. Jr, 283
Kochanny M. J., 461
Kojima S., 105
Kondoh Y., 619
Konishi J., 39, 455, 523, 531
Koss A., 589
Kostić K., 251
Kriegel H., 101
Kronauge J. F., 141
Kropp J., 283
Kubo A., 21
Kubodera A., 105
Kubota K., 27, 105, 747
Kubota R., 27, 747
Kuge Y., 531
Kulkarni P. V., 679
Kung H. F., 337

Lähde M., 55
Lambert C., 357
Lammertsma A. A., 841, 851
Langmuir V. K., 213
Långström B., 227, 871
Lansac J., 263
Laruelle M., 881
Lawrence A. M., 737
Lawton R. G., 417
Le N., 517
Leesmeister K., 73
Lemaire C., 227, 857
Lerthirunwong C., 727
Leverve X. M., 349
Lie K. I., 711
van Lier J. E., 175
Lindegren S., 719
Lindholm L., 719
Ling P.-y., 513
Liss R., 191
Livni E., 191
Longino M. A., 639
Lowenthal G. C., 807
Lupattelli G., 245
Luthra S. K., 159
Luxen A., 149
Lyster D. M., 327

Ma G. Q., 205
MacIntyre W. J., 1
Mäding P., 201
Madsen S. L., 431
Magata Y., 455, 523, 531
Maickel R. P., 697
Maier-Borst W., 685, 809
Maina Th., 481
Makoroff K., 651
Malison R. T., 881
Malpani B. L., 45
Manjil L. G., 159
Marek M. J., 797
Margaritis L., 627
Margouleff D., 191
Martell A. E., 431
Marti Batlle D. S., 349
Mathias C. J., 461
Mathieu J. P., 349
Mathis C. A., 571
Matsuda H., 303
Matsumoto K., 33, 39
Mattsson S., 719
Matys R., 809
Matzku S., 809
Mazière B., 497
Meeder J. G., 711
Melega W. P., 149
Mercer-Smith J. A., 797
Meyer G. J., 227
Michel P., 65
Michelson R. H., 337
Mimoto T., 455
Minn H., 55
Mishima Y., 311
Miura S., 619
Mizusawa S., 619
Moka D. C., 389
Morgan G. F., 65
Mori H., 303
Moroney D., 651
Morotomi Y., 399
Morton T., 651
Motekaitis R. J., 431
Murakami M., 619
Myers R., 159, 841

Nagamachi S., 399
Någren K., 497, 871
Nair N., 705
Najafi A., 205
Nakamichi H., 619, 455
Nakamura K., 21
Nakatsuka I., 523
Nastić-Mirić D., 251
Nayak U. N., 705
Nedelman M. A., 669
Neufeld D. M., 659
Neumann R. D., 517
Newton R. S., 775
Nishigori H., 753
Nissen H. P., 283
Nowak P., 651
Nutt D. J., 841
Nybäck H., 871

Ogihara-Umeda I., 753
O'Grady J., 245
Ohonishi T., 399
Olken N. M., 765
Opacka-Juffry J., 841
Orvig C., 327
Osman S., 183
Oyamada H., 105

Paans A. M. J., 711
Packard A. B., 357
Paik C. H., 269, 517
Pak K. Y., 669
Papanastasiou E., 627
Parkey R. W., 679
Pascali C., 851
Pauwels E. K. J., 759
Pernin C. R., 349
Phillips W. T., 539
Philpott G. W., 659
Pike V. W., 149, 159, 497, 841, 851, 857
Pirotte R., 65
Piwnica-Worms D., 141
Plotzke K. P., 765
Pomper M. G., 363, 461
Prakash R., 825
Preiss I. L., 423, 555
Pujić N., 251

Ramamoorthy N., 705
Ramanathan P., 705
Ransom R., 319
Rao T. N., 889
Rauscha F., 245
Ravert H. T., 549
Ray S., 191
Reba R. C., 269, 513, 517
Reiffers S., 759
Reynolds J. C., 517
Rhodes B. A., 797
Ribeiro-Barras M. J., 257, 263
Robeson W., 191
de Roo M., 375
del Rosario R. B., 417
Rösch F., 201
Roth C. A., 783
Rousseau J., 175
Rubin R. H., 191
Rudolph A. S., 539
Ruiz-Juvera A., 21
Ruyan M. K., 775

Sachdeva S. S., 705
Saha G. B., 1
Saji H., 455, 523, 531
Samuel A. M., 45
Sasaki H., 619
Sasaki T., 753
Sasayama S., 523
Sato K., 747
Sato T., 27
Sawas-Dimopoulou C., 627
Scheffel U., 549
Schilling U., 685
Schlemper E. O., 269
Schmiegel W. H., 809
Schrenk H. H., 685
Schuhmacher J., 809
Schulte L. D., 797
Schwendner S. W., 639
Schwochau K., 73
Seibyl J. P., 881
Sharkey R. M., 87
Sheldon K., 607
Shiba K., 303, 523
Shimura N., 105
Siegel M. E., 205
Sinclair I., 191
Singh P. R., 791
Sinn H., 685
Sinzinger H., 245
Sipilä H., 55
Skinner S., 765
Smith E. O., 881
Sobel B. E., 411
Solin O., 149
Solomon H., 319
Sood V. K., 517
Sosa A., 205
Spencer R. P., 83
Srinivasan A., 889
Stancato L., 765
Strauss H. W., 191
Stulzaft O., 167
Suehiro M., 549
Swahn C.-G., 871
Sybirska E. H., 881

Tada M., 27, 611, 747
Takahashi J., 27
Takahashi K., 619
Takahashi T., 105, 611
Takemura Y., 39
Tam S. H., 669
Tariq M. A., 423, 555
Terris A. H., 563
Thieme A. M., 461
Thomas J. R., 337
Thornback J. R., 65
Thorpe H. H., 319
Thorpe S. R., 411
Tilcock C., 831
Timmons J. H., 539
Tomura M., 611
Toubanakis N., 627
Troutner D. E., 791
Tsutsumi D., 455
Turton D. R., 159

Uemura K., 619
Ünsal I. S., 803

Vaalburg W., 227, 711
Vaidyanathan G., 275
VanBrocklin H. F., 363, 461
Van Doremalen P. A. P. M., 759
Van Heertum R. L., 897
Van Valkenburg C. F. M., 759
Van den Abbeele A. D., 289
Van den Broeck P., 65
Van der Krogt J. A., 759
Vanlić-Razumenić N., 251
Ventura S., 245
Verbruggen A., 375
Vesselle J.-M., 563
Virgolini I., 245
Virzi F., 239
Visser G. M., 711
Volkert W. A., 783, 791
Vora M. M., 405
Vuorinen J., 55

van Waarde A., 711
Wada K., 33, 39
Wagner H. N. Jr, 549
Wagner R., 149
Wahl R. L., 417, 765
Wakisaka M., 399
Wang T. S. T., 897
Watanabe K., 399
Webb D., 191
Webb G. A., 327
Weichert J. P., 639
Weimin Y., 619
Weiss S., 191
Welch M. J., 363, 431, 461
Whitney J. M., 571
Wijnhoven G., 759
Wilson A. A., 549
Wilson E., 669
Woods S. W., 881
Wu C., 239

Yamada S., 27, 747
Yamamoto K., 531
Yokoyama A., 33, 39, 455, 523, 531
Yonekura Y., 39, 523, 531
Yoosufani K. A., 83
Yoshitake A., 523

Zafran M., 703
Zalutsky M. R., 275
Zamora P. O., 797
Zea-Ponce Y., 881
Zhang Z., 327
Zhang Z. M., 607
Zimmerman R., 881
Zoghbi S. S., 881

TYPESET IN GREAT BRITAIN BY BPCC TECHSET LTD, EXETER. PRINTED BY BPCC WHEATONS LTD, EXETER